## NEW ABSTRACT:

Please replace the original abstract the following new abstract:

Abstract of the Disclosure


A roller cell pump having a shaped sliding surface composed of elliptical portions results from two different equations. The function of the unit is improved because the equations are modified and include adaptable parameters, so that by adaptation of the parameters, the shaped sliding surface can be adapted in portions optimally to the requisite function in that particular region of the shaped sliding surface, for instance the function of generating an underpressure or an overpressure. The course of the radii of the elliptical portions corresponds, at least in portions, to one of two equations that differ from the prior art.